Commonwealth of Kentucky
Division for Air Quality

REVISED PERMIT APPLICATION SUMMARY FORM

Completed by: Lisa Beckham

GENERAL INFORMATION:

Name:	Wild Turkey Distillery
Address:	1525 Tyron Road Lawrenceburg, KY 40342
Date application received:	5/6/2008
SIC Code/SIC description:	2085, Distilled and Blended Liquors (except apple jack)
Source ID:	21-005-00003
Agency Interest:	28
Activity:	APE20080001
Permit:	V-08-025

APPLICATION TYPE/PERMIT ACTIVITY:

[ ] Initial issuance	[ ] General permit
[ ] Permit modification	[ ] Conditional major
__Administrative	[X] Title V
__Minor	[X] Synthetic minor
__Significant	[ ] Operating
[X] Permit renewal	[X] Construction/operating

COMPLIANCE SUMMARY:

[ ] Source is out of compliance [ ] Compliance schedule included

[X] Compliance certification signed

APPLICABLE REQUIREMENTS LIST:

[ ] NSR	[X] NSPS	[X] SIP
[ ] PSD	[ ] NESHAPS	[ ] Other
[ ] Netted out of PSD/NSR	[ ] Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

[ ] Acid rain source

[ ] Source subject to 112(r)

[X] Source applied for federally enforceable emissions cap

[ ] Source provided terms for alternative operating scenarios

[ ] Source subject to a MACT standard

[ ] Source requested case-by-case 112(g) or (j) determination

[ ] Application proposes new control technology

[X] Certified by responsible official

[X] Diagrams or drawings included

[ ] Confidential business information (CBI) submitted in application

[ ] Pollution Prevention Measures

[ ] Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Actual[1] (tpy)	Potential[2] (tpy)
PM/PM_{10}	23.5/22.1	79.4/53.7
SO_2	81.8	225[3]
NO_X	37.0	225[3]
CO	40.8	225[3]
VOC	808	2522
Hydrogen Chloride	NA	9.0[3]

[1]Based on the 2007 KyEIS
[2]This potential includes fugitive emissions, which are not included when determining applicability of 401 KAR 51:017 or 401 KAR 52:020 to this source.
[3]Potential based on a federally enforceable source-wide limit

SOURCE DESCRIPTION:

On May 6, 2008 Austin, Nichols & Company, Inc. - Wild Turkey Distillery (WTD) submitted an application for the renewal of their Title V permit, V-03-038 R1. Supplemental information was received on July 1, 2008 and the application was considered complete on July 2, 2008. WTD operates a distillery in Anderson County, Kentucky, where bourbon is produced from grains through fermentation and distillation. Grain that has been milled is fed into mash cookers along with water where the grain starches are converted to sugars by heating. The cooked grain/water mixture is fed into fermenter vessels as a batch operation to convert the sugars to alcohol. After an appropriate residence time, the mixture is processed through distillation columns and condensers to separate the alcohol from the mixture. The condensed liquid is put into barrels to be aged. After the appropriate age is reached the bourbon is pumped out of the barrels, processed and stored until the product is transported offsite via tanker truck for bottling.

In addition to renewing the current permit, WTD is proposing to construct a new distillery within the existing site. Most of the equipment associated with the proposed distillery will be constructed new and will replace the existing distillery. Some of the process operations, currently part of the existing distillery will remain in operation as part of the proposed distillery (barrel emptying, barrel aging, product storage tanks and the wastewater treatment plant). Two new solid fuel-fired (wood or coal) boilers and one new natural gas-fired boiler will be constructed as part of the new distillery to replace the existing coal-fired and natural gas-fired boilers. The new solid fuel-fired boilers do not have the capability to burn both wood and coal at the same time. The boilers will initially be configured for wood burning, but if the facility decides to switch to coal the boilers will have to be reconfigured, which would take 2-3 months to complete and required a notification sent the Division's Field Office within 30 days from the decision. Apart from the operations that will be

incorporated into the new distillery, the existing distillery will shutdown upon startup of the new distillery operation.

Combined potential emissions from the existing and new distillery operations will cause WTD to exceed the Prevention of Significant Deterioration for Air (PSD) [401 KAR 51:017] threshold for carbon monoxide (CO), sulfur dioxide (SO_2) and nitrogen oxides (NO_X). In order to avoid PSD review, WTD is requesting the following limitations: a total heat input limitation of 749,760 MMBtu per year for the two proposed solid fuel-fired boilers and the proposed natural gas-fired boiler to limit CO and NO_X emissions and operation of a scrubber for the acid gas removal prior to the wet electrostatic precipitator (WESP) on the two solid fuel-fired boilers when combusting coal to limit SO_2 emissions and hydrogen chloride emissions. Additionally, the facility will have source-wide limits on CO, SO_2 and NO_X emissions of 225 tons per year.

WTD is currently a major source for hydrogen chloride, a hazardous air pollutant (HAP). However, the source is proposing taking a limit on HAP emissions to preclude Clean Air Act Section 112 and future applicability of maximum achievable control technology (MACT) standards to the facility. Coal usage shall be limited so that emissions of HCl do not exceed 9.0 tons per year and if burning coal on the two solid-fuel fired boilers use of the acid gas scrubber is required. The scrubber will use a caustic sodium hydroxide solution to remove acid gases. WTD will also track HAP emissions when burning wood.

WTD does not intend to operate both distillery operations at the same time, and will schedule the transition period from the existing operation to the new operation during the typical summer shutdown period in August 2009, with a startup of the new distillery in September 2009. The permitted units will not run concurrently, but for compliance purposes the permittee will maintain emission records of the total emission rates for the two operations to demonstrate that the 12-month rolling total emissions remain below the PSD thresholds.

SOURCE-WIDE EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

To preclude applicability of 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, total source-wide emissions of sulfur dioxide shall not exceed 225 tons per year based on a twelve month rolling total.

To preclude applicability of 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, total source-wide emissions of carbon monoxide shall not exceed 225 tons per year based on a twelve month rolling total.

To preclude applicability of 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, total source-wide emissions of nitrogen oxides shall not exceed 225 tons per year based on a twelve month rolling total.

To preclude applicability of CAA Section 112, source-wide emissions of a single Hazardous Air Pollutant (HAP), hydrogen chloride, shall not exceed 9.0 tons per year based on a twelve-month rolling total.